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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,082	05/29/2001	Kazuhiro Okamoto	2803.65577	6025
24978	7590	01/09/2006	EXAMINER	
GREER, BURNS & CRAIN 300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606			QI, ZHI QIANG	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

09/867,082

Applicant(s)

OKAMOTO ET AL.

Examiner

Mike Qi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,7 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,7 and 9-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,104,451 (Matsuoka et al) in view of US 6,024,335 (Min) and US 6,498,718 B1 (Kim et al).

Regarding claim 6, Matsuoka discloses (col.8, line 24 – col.9, line 15; col.12, lines 34 - col.13, line 12; Figs.1-4) that a liquid crystal display device comprising:

- liquid crystal panel (120);
- light source unit (fluorescent lamp 150);
- housing (50);
- frame (110) in the housing (50) for directly supporting the liquid crystal panel (120) and the light source unit (150) as a liquid crystal display unit (100); and the frame contacting a substrate of the liquid crystal panel;
- mechanism (400 and 210) attached to the frame (see Figs.1-2) for changing an angle of a display surface of the liquid crystal panel (tilted in a range from 5 forward to 20 backward which means the changing angles; see col.8, lines 41-43).

Matsuoka does not explicitly disclose that the mechanism is a hinge

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mechanism attached directly to the frame via screw holes, and the hinge mechanism having supporting member, connecting member and hinge shaft.

Min discloses (col.4, line 39 – col.5, line 19; Figs.4-8) that using hinge mechanism (40) attached to the frame (joins the LCD 10 and stand 20) via screw holes (see Fig.4), and the hinge mechanism (40) having hinge body (41) in which the second bracket (51) functions as the supporting member and the first bracket (50) functions as the connection member and shaft 52. Min indicates (col.4, line 57-col.5, line 18) that such hinge mechanism enables a user to freely control the viewing angle.

Therefore, it would have been obvious to those skilled in the art at the time the invention was made to modify the supporting structure of Matsuoka with the teachings of using hinge mechanism as taught by Min, since the skilled in the art would be motivated for freely control the viewing angle (col.4, line 38 – col.5, line 8).

Matsuoka and Min teach the invention set forth above except for that the hinge mechanism attached directly to the frame (LCD panel holding frame) via screw holes.

Kim discloses (col.2, lines 4-32; Figs.3A,3B) that a hinge mechanism (124) having hinge arm (126) attached directly to the LCD panel holding frame (114) (the supporting frame 114 holding the LCD panel 112) via screw holes, so as to allow the flat panel display assembly pivotally moving. As a generally available knowledge, the hinge mechanism attached directly to the LCD panel holding frame would be more secure and stronger to connect the LCD holding panel.

Therefore, it would have been obvious to those skilled in the art at the time the invention was made to modify the supporting structure and hinge mechanism of

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Matsuoka and Min with the teaching of the hinge mechanism directly attaching to the LCD panel holding frame as taught by Kim, since the skilled in the art would be motivated for pivotally moving the LCD panel holding frame more secure and stronger.

Regarding claim 10, Matsuoka discloses (col.8, lines 24- 43; Figs.1-4) that a mechanism (400 and 210) having a tilt mechanism (tilted in a range from 5 forward to 20 backward which means the changing angles; see col.8, lines 41-43) that means changing the angle of a display surface of the liquid crystal panel, and that is a self-standing device.

Regarding claims 11-12, Matsuoka discloses (col.4, lines 5-8; col.6, lines 36-52; Figs.2 and 7-8) that a board (20) for driving and controlling the liquid crystal unit (100), i.e., a circuit board for driving the liquid crystal panel, and the circuit board (20) being attached to a back side of the frame (such as the second enclosure '220') (see Fig.2); and a shield panel (231) covers the circuit board (20), i.e., a shield cover covers the circuit board.

3. Claims 7, 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuoka, Min and Kim as applied to claims 6, 10-12 above, and further in view of JP 7-56516.

Regarding claim 7, Matsuoka, Min and Kim teach the invention set forth above except for that the mechanism is attached to a back surface section of the liquid crystal display unit.

JP 7-56516 discloses (abstract and Fig.3) that the tilt mechanism (13) is provided on (attached to) the back surface side of the display panel (22), and such mechanism facilitates the adjustment of an angle of elevation in a self-standing display device.

Therefore, it would have been obvious to those skilled in the art at the time the invention was made to modify the supporting structure and the hinge mechanism of Matsuoka, Min and Kim with the teachings of the tilt mechanism (13) as taught by JP 7-56516, since the skilled in the art would be motivated for facilitating the adjustment of an angle of elevation in a self-standing display device (see abstract).

Regarding claim 9, Matsuoka discloses (Fig.1) that a portion of the back surface section of the liquid crystal display unit (100) is substantially parallel to the display surface (such as the display screen '101') of the liquid crystal display unit (100).

Regarding claim 13, Matsuoka, Min, Kim and JP 7-56516 teach the invention set forth above except for that the connection member has a portion which extends parallel to the supporting member when the LCD panel in a vertical position.

Min further discloses (col.4, line 39 – col.5, line 19; Figs.4-8) that the hinge mechanism (40) in which the first bracket (50) (connecting member) has a portion (because it is L-shape) extends parallel to the second bracket (51) (supporting member) when the LCD panel in a vertical position. Min indicates (col.4, line 57-col.5, line 18) that such hinge mechanism enables a user to freely control the viewing angle.

Therefore, it would have been obvious to those skilled in the art at the time the invention was made to modify the supporting structure and the hinge mechanism of Matsuoka, Min, Kim and JP 7-56516 with the teachings of the hinge mechanism as

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taught by Min, since the skilled in the art would be motivated to freely control the viewing angle (col.4, line 38 – col.5, line 8).

Response to Arguments

4. Applicant's arguments filed Nov.25, 2005 have been fully considered but they are not persuasive.

1) The reference Matsuoka is relied on to teach (col.8, line 24 – col.9, line 15; col.12, lines 34 - col.13, line 12; Figs.1-4) that a frame arrangement in a liquid crystal display device.

2) The reference Min is relied on to teach (col.4, line 39 – col.5, line 19; Figs.4-8) that a hinge mechanism in a liquid crystal display device.

3) The reference Kim is relied on to teach (col.2, lines 4-32; Figs.3A,3B) that a hinge mechanism (124) having hinge arm (126) attached directly to the LCD panel holding frame (the supporting frame 114 holding the LCD panel 112) via screw holes.

Conclusion.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Qi whose telephone number is (571) 272-2299.


The examiner can normally be reached on M-T 8:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Qi
January 3, 2006


ANDREW SCHECHTER
PRIMARY EXAMINER